

# **US-12 Improvement Study**

## **Finding of No Significant Impact & Supporting Documentation for a Finding of No Significant Impact**



### **City of Saline to Munger Road Pittsfield Charter Township Washtenaw County, Michigan**

FONSI Issued by:  
Federal Highway Administration

FONSI Issued on:  
October 19, 2004

FONSI Amended on:  
January 25, 2005

Supporting Documentation Prepared by the  
**Michigan Department of Transportation**

In cooperation with:  
**U.S. Department of Transportation  
Federal Highway Administration**

Federal Highway Administration  
Amended Finding of No Significant Impact  
US-12 from Saline to Munger Road  
Washtenaw County, Michigan

The FHWA has determined that this project will not have any significant impacts on the human or natural environment. This Amended Finding of No Significant Impact is based on the attached Environmental Assessment and subsequent Biological Assessment, which has been independently evaluated by the FHWA and determined to accurately address the environmental issues and impacts of the proposed project. In addition:

- The proposed project will require the purchase of additional right-of-way and displacement of six residents and one business, which MDOT will perform in compliance with the Federal Uniform Relocation Assistance and Real Property Acquisition Act of 1970 as amended.
- A Wetland Finding is enclosed describing 4.4 acres of affected regulated wetlands.
- It has been verified that MDOT conducted the Public Involvement Process accordingly.

The Environmental Assessment and Biological Assessment provide sufficient evidence and analysis for determining that an environmental impact statement is not required. The FHWA takes full responsibility for the accuracy, scope, and content of the Environmental Assessment and Biological Assessment documents.

1/25/05

Date

David Calabrese

Responsible Official

Field Operations Group Leader

Title


Federal Highway Administration  
Finding of No Significant Impact  
US-12 from Saline to Munger Road  
Washtenaw County, Michigan

The FHWA has determined that this project will not have any significant impacts on the human or natural environment. This Finding of No Significant Impact is based on the attached Environmental Assessment, which has been independently evaluated by the FHWA and determined to accurately address the environmental issues and impacts of the proposed project. In addition:

- The proposed project will require the purchase of additional right-of-way and displacement of six residents and one business, which MDOT will perform in compliance with the Federal Uniform Relocation Assistance and Real Property Acquisition Act of 1970 as amended.
- A Wetland Finding is enclosed describing 4.4 acres of affected regulated wetlands.
- It has been verified that MDOT conducted the Public Involvement Process accordingly.

The Environmental Assessment provides sufficient evidence and analysis for determining that an environmental impact statement is not required. The FHWA takes full responsibility for the accuracy, scope, and content of the Environmental Assessment document.

10/19/2004  
Date

  
Responsible Official

Field Operations Group Leader  
Title

**DEPARTMENT OF TRANSPORTATION**  
**Federal Highway Administration**  
**E.O. 11990 – Wetland Finding**

## **DESCRIPTION OF PROJECT**

The recommended alternative (proposed alternative) generally follows existing US-12 with a slight deviation north of the current roadbed to straighten the curve just east of Campbell Road. The alternative consists of a combination of the five-lane urban arterial and four-lane urban boulevard. The boulevard segment of the roadway extends 1.4 miles and begins approximately 0.6 miles west of the State/Moon Roads intersection and ends approximately 0.8 miles east of the State/Moon Roads intersection. Improvements to the US-12/US-23 interchange consist of modifications to the existing rural diamond interchange. The entrance to southbound US-23 would be moved to align with the existing southbound exit and the entrance to northbound US-23 would be moved to align with the existing northbound US-23 exit. The flow of traffic through the interchange would be improved by reducing the number of signals from three to two.

## **DESCRIPTION OF WETLANDS AFFECTED**

The recommended alternative will affect 4.4 acres of regulated wetlands, which include 2.5 acres of emergent, 1.3 acres of scrub shrub, and 0.6 acres of forested. These impacts will occur at approximately 10 individual wetland systems.

## **MEASURES TO MINIMIZE HARM**

As indicated above, the recommended alternative will impact a total of 4.4 acres of wetlands along its entire length. The impacted wetlands will be compensated by creating a total of 6.9 acres of wetland at another location. The 6.9 acres of newly created wetlands will reflect the standard Michigan Department of Environmental Quality (MDEQ) mitigation ratio of 2:1 for forested wetlands and 1:1.5 for all other wetland types. Compensation for the impacted wetlands will be created on a portion of an 118 acre site located approximately nine miles west of the study area, in Section 23 of Bridgeport Township. This site is currently owned by the Michigan Department of Transportation. The mitigation wetlands will replace the functions and values lost, with the added benefit that the new wetlands will be one large, contiguous area. A plan to control undesirable exotic plants will also be included as part of the wetland mitigation plan. Additionally a conservation easement will be established for the entire wetland mitigation area. Wetland permits and other necessary permits will be obtained from the MDEQ and other local municipalities respectively prior to construction.

## **COORDINATION AND PUBLIC INVOLVEMENT**

This project has been coordinated with representatives of the U.S. Environmental Protection Agency, U.S. Department of Interior, U.S. Fish and Wildlife Service, the

Michigan Department of Environmental Quality and other agencies. A formal public hearing was held on November 19, 2003, as well as several meetings and small group information meetings have been held with the public.

## CONCLUSION

Based on the above consideration and the information and analysis presented in the Environmental Assessment and supporting documentation, it is determined that there is no practical alternative to the proposed new construction in the wetlands and that the proposed action includes all practical measures to minimize harm to wetlands which may result from such use.

JENNIFER GRANHOLM  
GOVERNOR



STATE OF MICHIGAN  
DEPARTMENT OF TRANSPORTATION  
LANSING

GLORIA J. JONES  
DIRECTOR

October 8, 2004

Mr. James J. Steele  
Division Administrator  
Federal Highway Administration  
315 W. Allegan Street, Room 201  
Lansing, Michigan 48933

Dear Mr. Steele:

This is a request for a Finding of No Significant Impact (FONSI) for the proposed improvements to US-12 from the city limits of Saline easterly to Munger Road in Pittsfield Township, Washtenaw County, Michigan (C.S. 81031, J.N. 30090).

An Environmental Assessment (EA) for the proposed project was approved by the Federal Highway Administration on October 22, 2004. Copies of the EA were distributed to potentially affected or interested parties. A public hearing on the proposed project was held on November 19, 2003. Approximately 104 people attended the public hearing. A letter certifying the public hearing process was transmitted to your office on January 29, 2004.

The comments, questions, and suggestions submitted to the Michigan Department of Transportation (MDOT) regarding this project are summarized in the enclosure to this request for a FONSI. Copies of the letters received are included at the end of this enclosure.

Based on studies of the proposed project conducted by MDOT, we request that a FONSI be issued and that location/design approval be granted.

Sincerely,

A handwritten signature in cursive script, reading "Susan P. Mortel", is written over a horizontal line.

Susan P. Mortel, Director  
Bureau of Transportation Planning

Enclosures



U.S. Department  
of Transportation

Federal Highway  
Administration

Michigan Division

315 West Allegan St., Room 201  
Lansing, Michigan 48933

October 19, 2004

Ms. Susan P. Mortel, Director  
Bureau of Transportation Planning (B340)  
Michigan Department of Transportation  
Lansing, Michigan

Dear Ms. Mortel:

Finding of No Significant Impact  
US-12 Improvement from Saline to Munger Road  
Pittsfield Township  
Washtenaw County, Michigan

Reference is made to your letter of October 8, 2004, which requested a Finding of No Significant Impact (FONSI) for the proposed project and enclosed a Memorandum of Agreement (MOA). We have completed our final review of the Environmental Assessment document and the attachments to your letter. Based on our review, we conclude the proposed project will have no significant impacts to the environment. Accordingly, our signed FONSI determination and signed MOA are enclosed. A copy of the signed MOA is being sent to the Advisory Council on Historic Preservation and the State Historic Preservation Officer, in accordance with the revised Section 106 procedures. Please transmit a notice to the affected federal, state, and local government units, informing them the FONSI document will be available from your Department, or our office, upon request from the public.

By our adoption of the FONSI and completion of the public comment/hearing requirements of 23 U.S.C. 128, the MDOT is authorized to proceed with further project development.

Sincerely,

David Calabrese  
Field Operations Group Leader

For: James J. Steele  
Division Administrator

Enclosure

cc: Mike O'Malley, MDOT, Transportation Planning (B340)

**DOCUMENTATION SUPPORTING A FINDING OF NO SIGNIFICANT IMPACT FOR THE PROPOSED IMPROVEMENTS TO US-12 FROM THE CITY LIMITS OF SALINE EASTERLY TO MUNGER ROAD, PITTSFIELD TOWNSHIP, WASHTENAW COUNTY, MICHIGAN.**

**(C.S. 81031, J.N. 30090)**

**SECTION 1  
PROPOSED PROJECT**

**1.1 PROJECT DESCRIPTION**

An Environmental Assessment/Section 4(f) Evaluation (EA/4(f)) for the proposed improvements to US-12 from the city limits of Saline easterly to Munger Road in Pittsfield Township, Washtenaw County, Michigan was approved by the Federal Highway Administration (FHWA) on October 22, 2003. Legal notices were placed in the Ann Arbor News on November 5, 2003 and the Saline Reporter on November 6 and 15, 2003 announcing the availability of the Environmental Assessment. The public hearing was held in accordance with Federal and State Public Involvement/Public Hearing Procedures. The public hearing was held on November 19, 2003 at the Pittsfield Township Office. Approximately 104 people attended the public hearing. The public comment/hearing requirements have been met as certified by the Michigan Department of Transportation (MDOT) Public Hearings Officer. **(Appendix A).**

During the US-12 Improvement Study, more than 16 major improvement alternatives were proposed and evaluated. The relative merits of each alternative were assessed according to specific criteria to determine which alternatives best met the study's purpose and need. The improvement alternatives included several roadway alignments, four cross-section options, four US-12/US-23 interchange options, and transit/transportation demand management (TDM) and transportation systems management (TSM) strategies. In November 2002, the alternatives were reduced to two build Practical Alternatives (1 and 1-N), and a No-Build Alternative. These alternatives were presented to the public at a public information meeting on November 19, 2002.

Since November 2002, Practical Alternatives 1 and 1-N were evaluated in the context of selecting a Preferred Alternative by comparing their respective impacts to traffic, engineering, residential and commercial properties, wetlands, woodlands, streams, historic properties, recreational properties, and other socioeconomic and environmental resources. Input from the public, local stakeholders, federal and state resource agencies, and government officials have helped guide the selection of a Preferred Alternative. A modified version of Practical Alternative 1 was chosen as the Preferred Alternative.

Two alternatives were carried forward and analyzed in the EA/4(f): (1) No Build Alternative and (2) Modified Practical Alternative 1 (Preferred Alternative). The Preferred Alternative generally followed existing US-12 with a slight deviation north of the current roadbed to straighten a curve just east of Campbell Road. A combination five-lane urban arterial with a four-lane urban boulevard section was selected as the preferred roadway cross-section.



The five-lane urban arterial will be constructed from the east city limits of Saline to Munger Road in Pittsfield Township with the four-lane boulevard segment being constructed 0.6 miles west of the State/Moon Road intersection and ending 0.8 miles east of the State/Moon Road intersection. The improvements also include modifications to the existing US-12/US-23 rural-diamond interchange.

Since fall 2003, MDOT has been discussing alternative Section 4(f) mitigation measures with the Harwood family. As part of these discussions, MDOT proposed to relocate the farmstead and several outbuildings approximately 200 feet to the north on the same parcel. MDOT also proposed to restore the exterior of the farmstead including the roofs, siding, doors, and windows. On July 19, 2004 after much consideration the Harwood family formally declined MDOT's final mitigation offer. Copies of MDOT's formal mitigation offers and a copy of the Harwood family's response to MDOT are included in **Appendix B**.

In response to the Harwood's decision and comments received at the public hearing and during the public comment period, MDOT has refined the Preferred Alternative in order to minimize impacts on the Harwood farmstead, as well as other properties along US-12.

MDOT is recommending that a refined Preferred Alternative and the modifications to the existing US-12/US-23 rural-diamond interchange be constructed. The modified Preferred Alternative was selected because it provides a balanced solution to the area's transportation needs, minimizes impacts on the built and natural environmental, and meets the study's purpose to improve mobility and travel capacity by widening US-12 to a five lane/four lane boulevard roadway from west of Industrial Drive in Saline to Munger Road in Pittsfield Township, Washtenaw County, Michigan.

## **1.2 CORRECTIONS AND CLARIFICATIONS TO THE ENVIRONMENTAL ASSESSMENT**

1. Page 4-10, Paragraph 2: The following phrase "critical habitat for the Indiana bat" should be changed to read "highly suitable habitat for the Indiana bat".
2. Page 3-12, Paragraph 1: Construction of the Preferred Alternative will result in 0.7 acres of woodland and not 0.5 acres as indicated in the document.
3. Page 4-1, Paragraph 3, Line 4: Delete comma after "4(f)" and between "possible"

## **1.3 DESCRIPTION OF RECOMMENDED ALTERNATIVE:**

The Recommended Alternative, shown in **Figure 1.0**, generally follows the existing US-12 alignment between Warner Road and just east of the Harwood farmstead. The Recommended Alternative is a refinement of the Preferred Alternative identified in the October 2003 Environmental Assessment.

East of the Harwood farmstead the Recommended Alternative shifts north of the existing right-of-way (ROW) line. This northerly shift varies in distance between 30 feet north of MDOT's existing ROW line to the west, 90 feet north across from the Warner Creek Subdivision, and 40 feet north of MDOT's existing ROW line to the east. The Recommended Alternative was also developed to minimize impacts on the Warner Creek Subdivision. This alternative ties into the existing US-12 alignment just west of the US-12/Platt Road intersection.

The width of the proposed cross-section through this area is approximately 110 feet. A typical cross-of this section is illustrated in **Figure 1.2**. The Recommended Alternative also slightly improves the skew angle of the US-12/Platt Road intersection.

**INSERT FIGURE 1.0**

**INSERT FIGURE 1.2**

**RECOMMENDED ALTERNATIVE IMPACTS:**

Impacts associated with the Recommend Alternative are generally lower for all resources with the exception of wetlands and woodlands. Key impacts associated with the Recommended Alternative are highlighted in **Table 1.0**, further information on each resource is listed below.

**Woodlands:** The Recommended Alternative has slightly greater impacts (3.4 acres as compared to 0.7 acres) on the woodland area west of Platt Road. These impacts occur on three wooded parcels with frontage on US-12. These parcels are currently zoned residential and are not part of the Pittsfield Preserve and are located south of the woodland areas identified as having highly suitable habitat for the Indiana Bat. The area with highly suitable habitat is located to the north of where the proposed impacts to the woodland areas would occur, (*US-12 Improvement Study, Natural Resources Technical Report, June 2003*).

As stated in the EA, to avoid impacts to the Indiana Bat suitable habitat, tree cutting in this affected woodland area will be limited to the period between November 1 and April 30.

MDOT will mitigate 3.4 acres of woodland area in accordance with 23 CFR, Part 777 and the Section 7 of the Endangered Species Act. An August 11, 2004 meeting was held with the resource agencies and a tentative mitigation approach was agreed upon at that meeting (See **Appendix C** for meeting minutes). As a context sensitive design option, MDOT will provide buffer for the wooded wetland to be developed on the wetland mitigation site. MDOT will add 3.4 acres of woodland buffer to the bank site located in Bridgewater Township (See **Appendix D** for a preliminary site layout). Prior to construction, MDOT will also coordinate with the US Environmental Protection Agency, US Fish & Wildlife Service, and the Michigan Department of Environmental Quality to finalize all mitigation requirements for the woodland area.

**Wetlands:** The Recommended Alternative has slightly greater impacts (5.4 acres compared to 4.4 acres) on wetlands along the US-12 corridor. The primary increase for these wetland impacts are associated with the increased ROW needed between Platt Road and Sauk Trail (entrance to Warner Creek subdivision).

As stated in the EA, MDOT has already purchased a 118 acre wetland mitigation site approximately nine miles of the study area in Bridgewater Township. This site is in the same eco-region as the US-12 study area. All wetland impacts associated with the project will be mitigated at this site.

**Harwood Farmstead:** The Recommended Alternative has significantly reduced the impacts on the Harwood farmstead in comparison with the Preferred Alternative identified in the EA. The Recommended Alternative only requires approximately 10 feet (0.09 acres) of additional ROW from the Harwood family. No relocation of the farmstead or any associated outbuildings will be required with this alternative.

Mitigation requirements for the Harwood farmstead will be minimal for the Recommended Alternative. Based on these limited impacts, MDOT's proposed mitigation will only be the restoration of any impacted landscaping in the front yard. Additional information on MDOT's proposed mitigation approach can be found in the draft Memorandum of Agreement with SHPO located in **Appendix E**.

**Pittsfield Preserve:** The Recommended Alternative has also reduced the impacts to the Pittsfield Preserve. The Pittsfield Preserve is a 450 acre park which Pittsfield Township purchased in April 2002. The property is a Section 4(f) resource. The preferred alternative would have required MDOT to acquire 3.8 acres of the Pittsfield Preserve adjacent to the existing US-12 corridor. The Recommended Alternative only impacts 0.1 acres from the far southeastern corner of the Pittsfield Preserve property. MDOT coordinated with Pittsfield Township officials regarding this alignment change. Pittsfield Township officials concurred with the proposed alignment change and the reduced impacts on the Pittsfield Preserve.

As identified in the EA, MDOT will undertake measures to minimize the impacts to the Pittsfield Preserve. These measures will likely include appropriate planting of trees and shrubs on the north side of MDOT's ROW. This will serve to minimize visual impacts as well as replace vegetation removed as part of the grading activities.

#### **Section 4(f) Impacts:**

The Section 4(f) Evaluation in the US-12 Improvement Study Environmental Assessment (EA) discusses the proposed project, its potential impacts to Section 4(f) resources, and possible avoidance alternatives and measures to minimize harm to those resources. Based on that evaluation, a preliminary determination was made that the Preferred Alternative would impact several Section 4(f) resources, especially the Harwood farmstead and the Pittsfield Preserve. Cultural resources evaluations determined that the Harwood farmstead, located on the north side of US-12, just east of Campbell Road, was eligible for the National Register of Historic Places (NRHP) due to its owners' historical significance and connection with the Underground Railroad. The Pittsfield Preserve, also located in this general area, is a Section 4(f) recreational property and nature preserve.

The Preferred Alternative that was presented in the EA was the proposed construction of a multi-lane roadway using a combination five-lane urban arterial and four-lane urban boulevard cross-section. The only variation from the existing roadway was at the curve just east of Campbell Road where the proposed alignment was straightened to better meet current MDOT roadway design standards and to reduce noise impacts in the area of the Warner Creek subdivision. It is at this existing US-12 curve, east of Campbell Road, that the Harwood farmstead and a portion of the Pittsfield Preserve are located. Therefore, the Preferred Alternative potentially displaced the Harwood farmstead and affected 3.8 acres of the Pittsfield Preserve. As mitigation for the historic Harwood farmstead, the house and associated outbuildings would need to be relocated further north on the existing Harwood property. MDOT coordinated with the State Historic Preservation Office (SHPO) regarding the Determination of Effects for this historic resource and all possible measures to minimize harm, including relocation. A Draft Memorandum of Agreement (MOA) was included as Appendix E in the EA. In addition, during the summer 2004, MDOT conducted extensive mitigation coordination with the farmstead property owners. However, the property owners would not agree to the stipulations of the mitigation agreement as stated in a July 2004 correspondence to MDOT.

***INSERT TABLE 1.0 – Comparison of Impacts Table***

As a result, MDOT developed a Recommended Alternative for US-12 that avoids relocating the Harwood farmstead and minimizes impacts to the Pittsfield Preserve. During the development of the Recommended Alternative, many design refinements to the roadway cross-section and shifts in roadway alignment to closer match existing US-12 were considered. For example, between Warner Road and Platt Road, a design refinement will reduce the required road right-of-way (ROW) to 110 feet wide, thereby creating a more context sensitive design that minimizes impacts to the Harwood property and the Pittsfield Preserve. For the Recommended Alternative, impacts to the Harwood farmstead have been reduced to purchasing only .09 acres of ROW. Impacts to the Pittsfield Preserve have been reduced from 3.8 acres to .1 acres.

Coordination with the SPHO has been ongoing throughout the US-12 study. MDOT is currently working with the SHPO to finalize the US-12 Improvement Study MOA.



## SECTION 2 COMMENTS AND RESPONSES

The following are summaries of letters, comments and emails that were received as part of the public record and public hearing phases of the US-12 Improvement Study. Each comment/concern has been responded to and copies of the letters are included in the Appendices.

### 2.1 LETTERS FROM FEDERAL AND STATE AGENCIES REGARDING THE EA/4(f)

1. The United States Department of Health and Human Services has reviewed the document and had the following comments:

**Comment:** The U.S. Department of Health and Human Services indicated that they noticed there were a number of sites along US-12 that had potential hazardous waste and/or asbestos or lead-containing materials. They were pleased to read that further sampling and investigation will be made if these materials are encountered. The U.S. Department of Health and Human Services also indicated potential human health concerns from anticipated construction-related impacts appear to have been adequately addressed; therefore they have no further comments to offer at this time.

**Response:** Comments noted.

2. The United States Department of Interior has reviewed the document and had the following comments:

**Comment:** The U.S. Department of Interior indicated that they concur that there is no feasible and prudent alternative to the proposed project, if project objectives are met. They also concur with MDOT's measures to minimize harm to properties eligible for listing to the National Register of Historic Places and to the Pittsfield Preserve, as described in the draft Section 4(f) Evaluation. The Department of Interior would also like MDOT to minimize visual impacts to the Pittsfield Preserve by including replacement planting of long-lived native trees and shrubs suited to local site conditions.

**Response:** MDOT will provide replacement plantings of "long-lived native trees and shrubs suited to local site conditions" in order to minimize visual impacts to the Pittsfield Preserve. MDOT will also ensure that tree clearing will be limited to clear zone areas within the proposed right-of-way. Right of way clearing will be limited to minimize impacts to the buffer areas associated with the highly suitable Indiana Bat habitat, and will minimize visual impacts to the Pittsfield Preserve.

**Comment:** The U.S. Department of Interior indicated that the Preferred Alternative will cross 10 wetlands impacting 4.4 acres. Those of particular value are identified as emergent wetlands associated with the Pittsfield Drain (Wetland #23), forested wetlands west of Platt Road between U.S. 12 and Textile Road (Wetland #15), and an emergent wetland east of Carpenter Road (Wetland #4). Although no impacts to

Wetland area #4 are identified, the proximity of the project to the wetland would suggest the potential for indirect impacts. Additional information on the potential indirect impacts on the project on this and other wetlands in close proximity to the project should be discussed.

**Response:** In the vicinity of Wetland #4, the northern edge of pavement has been held in place with improvements occurring to the south. Consequently, no filling or grading in or immediately adjacent to wetland #4 is proposed. Storm water in this location will be directed to a regional storm water detention area on the south side of US-12 approximately 500 feet east of Wetland #4. In general, indirect impacts to wetlands in close proximity to the project will be controlled by implementation of a storm water management plan and temporary and permanent soil erosion and sedimentation control measures.

**Comment:** The Department of Interior states that the EA appropriately addresses wetlands and compensation and does a good job discussing compensatory mitigation which would include in-kind replacement of all wetland types. The Department of Interior recommends that a more detailed wetland mitigation plan be prepared and include the information that can be found on page 3 of their letter. (The letter can be found in Appendix B of the EA).

**Response:** MDOT has acquired a 118-acre site in Bridgewater Township that will be utilized to provide wetland mitigation for the US-12 improvements proposed as part of this study. MDOT is in the process of developing a wetland bank agreement in accordance with MDOT and Michigan Department of Environmental Quality (MDEQ) guidelines. This agreement will include provisions for management and long-term protection through a conservation easement. MDOT is committed to establishing 40 to 80 acres of wetland habitat on this parcel by 2006, which is in advance of the proposed US-12 improvements. The wetland mitigation site will include a 100-foot wide buffer zone adjacent to the wetland areas. A preliminary site layout of the wetland mitigation site has been included within **Appendix D**.

Performance criteria, measures to control the establishment of invasive and/or non-native plant species, and monitoring protocols (minimum of five years) will be in accordance with the recently published MDEQ guidance entitled *Performance Standards for Wetland Mitigation and Monitoring of Wetland Mitigation*. If the mitigation wetland fails to meet the established performance standards and ecological functions by the end of the sixth year, or if it is apparent that these wetland functions will not be achieved with the current wetland design, MDOT shall:

1. Assess the problems and list probable causes;
2. Develop reasonable and necessary corrective measures as a revision to the original plan; and
3. Implement corrective measures and additional monitoring as mutually agreed upon by the MDEQ and MDOT (Environmental Section) to assure the proper acreage for each vegetative type is created for this project.

In the event a portion of, or the entire, wetland is destroyed due to uncontrollable natural disasters (fire, tornados, severe floods, man-made interference, etc. outside MDOT's control) MDOT will take corrective action only after consultation with the resource agencies. This consultation will ensure corrective actions are feasible and a reasonable expenditure of public funds.

**Comment:** The Department of Interior indicated that there is a discrepancy in the amount of woodland acreage that will be impacted. Two different numbers were used in the document. The text in the EA indicates that 0.5 acres of woodlot will be impacted, while tables 2.4 and 2.5 indicate 0.7 acres of a woodlot will be impacted by the preferred alternative.

**Response:** MDOT has made the correction in Section 1.2 (Corrections & Clarifications) However, the construction of the Recommended Alternative will result in the loss of 3.4 acres of the woodlot located west of Platt Road between US-12 and Textile Road.

**Comment:** The Department of Interior indicated that the federal candidate species, the eastern massasauga rattlesnake was also identified for this project. While the Endangered Species Act of 1973, does not extend protection to candidate species, the Department of the Interior encourages avoidance of unnecessary impacts to candidate species in an effort to reduce the likelihood they will require the protection of the Act in the future. The impact of the Preferred Alternative on potential eastern massasauga habitat was not described. Additional information on potential impacts to the eastern massasauga would provide for a better understanding of the total environmental consequences of the proposed project.

**Responses:** The United States Department of Interior, Fish and Wildlife service records indicate that the eastern massasauga rattlesnake "may occur in the proposed project area" (See Appendix F in EA document). This species was not observed during wildlife inventories completed in the spring and summer of 2002. Wetland areas 15, 21 and 23 could potentially contain habitat for the eastern massasauga rattlesnake due to their large size and vegetative characteristics. Impacts to these wetlands are limited and confined only to the edges adjacent to the existing road. The remainder of the impacted wetlands associated with this project do not contain habitat for eastern massasauga rattlesnake.

3. The United States Environmental Protection Agency (EPA) has reviewed the document and commends MDOT for the clear documentation of effort to minimize impacts to environmental and historical/cultural resources associated with this project. EPA has no objections to the EA or the plans to issue a Finding of No Significant Impact (FONSI) provided that the following comments are addressed:

**Comment:** EPA would like more documentation regarding the differences in performance between the Preferred Alternative and the five-lane cross section for the entire study.

**Response:** Throughout the US-12 Improvement Study, the roadway improvement alternatives were developed and evaluated using a defined set of goals, evaluation criteria and measures. The alternatives evaluation process focused on five general evaluation categories from which more detailed criteria and measures were used to compare the alternatives being considered. These categories are: transportation, engineering design, social and economic, environmental and land use. Comparing the relative merits of the Recommended Alternative (a combination five-lane arterial and four-lane boulevard roadway cross-section) to both the Preferred and Practical Alternative, the MDOT study team used a balanced approach evaluating a range of criteria and measures within each evaluation category. The following paragraphs briefly summarize the evaluation results or “performance characteristics” that led to the selection of the Recommended Alternative.

Transportation – The Recommended Alternative includes a five-lane arterial cross-section in the areas of the US-12 corridor that consist of denser commercial and residential land uses. The area of the boulevard cross-section, from the Rolling Hills subdivision east of Industrial Park Drive to the Ann Arbor Railroad tracks near Fosdick Road, consists of more future or planned commercial and residential land uses than existing uses and, therefore, provides more flexibility regarding right-of-way needs and access management.

For the five-lane sections of the Recommended Alternative, the center left turn lane removes the left turns from the through lanes, thus increasing travel capacity in the areas of denser development. The four-lane boulevard section of the Recommended Alternative improves traffic operations through the Moon Road/State Road intersection (by eliminating left turns) over the five-lane cross-section that was proposed for Alternative 1. The Level of Service (LOS) comparison of these two cross-sections (at Moon and State roads) shows the four-lane boulevard operates at LOS C, B, and B respectively for the AM, mid-day, and PM peak travel hours. The five-lane cross-section operates at LOS D, C, and C respectively for the AM, mid-day, and PM peak travel hours at the same location. In addition, the four-lane boulevard with its physical median separation between directional traffic flows will provide for safer traffic operations as well as acts as a pedestrian sanctuary for residents crossing the US-12 roadway at the intersection of US-12 and Moon/State Roads.

The four-lane boulevard cross-section of the Recommended Alternative is also more compatible with MDOT’s access management plan recently developed for US-12 than the five-lane cross-section proposed for Alternative 1. The four-lane boulevard makes it easier for vehicles to turn out of driveways along US-12. With the five-lane roadway, there is more possibility for left-turn conflicts for vehicles attempting to access more closely spaced residential or commercial driveways.

Engineering Design – Both the five-lane arterial and four-lane boulevard roadways adhere to MDOT, FHWA and AASHTO design standards, so the performance characteristics for these two cross-sections are the same from a design perspective. Both cross-sections would accommodate pedestrian and bicycle improvements throughout the corridor. Generally, multi-lane roadways will typically reduce vehicle crashes by 19 to 35% over the existing two-lane US-12 roadway. However, some safety studies have shown that four-lane boulevards have lower crash rates than five-lane arterials. Also, vehicular

access can be more effectively managed through design with the four-lane boulevard.

Social and Economic - The Recommended Alternative is a modification of the Preferred Alternative with a combination four-lane boulevard and five-lane arterial cross-section. The proposed roadway location for the Recommended Alternative between Campbell Road and Platt Road was shifted north of existing US-12 in the area of the Warner Creek subdivision. Community impacts, such as changes in community cohesion and noise levels, were evaluated.

Comparing the Recommended Alternative to both the Preferred Alternative and Practical Alternatives 1 and 1-N, the Recommended Alternative requires less Right-of-Way (ROW) between Fosdick Road and Platt Road, south of US-12. Moreover, the shift in roadway alignment for the Recommended Alternative has less noise impacts on the single-family residences located south of existing US-12 and east of Campbell Road in comparison with Alternative 1. The four-lane boulevard section of the Recommended Alternative provides better pedestrian access and roadway crossing opportunities. Crossing a five-lane roadway was an expressed safety concern for Pittsfield Township residents. Pedestrian crossings for the five-lane arterial cross-sections for both the Preferred Alternative and Alternative 1 were considered at all signalized roadway intersections.

With regard to economic benefits, the four-lane boulevard section of the Recommended Alternative may provide a slight benefit over the five-lane cross-section with improved vehicular access to existing and planned commercial development between the Rolling Hills subdivision and the Ann Arbor Railroad tracks. With regard to park impacts, neither the Recommended Alternative, Preferred Alternative nor Practical Alternatives 1 and 1-N would affect the Rentschler Farmstead. The Recommended Alternative will require less right-of-way (ROW) from the Pittsfield Preserve; 0.1 acres compared to 3.8 acres for the Preferred Alternative and 1.4 acres for Practical Alternative 1.

Environmental - The wetland and woodland impacts associated with the Recommended Alternative are generally less than the impacts associated with the Preferred Alternative and Alternative 1. Comparing the Recommended Alternative with the Preferred Alternative and Alternative 1, the Recommended Alternative impacts 5.4 acres of wetlands, while the Preferred Alternative and Alternative 1 impacts 4.4 and 4.1 acres respectively. The Recommended Alternative impacts 3.4 acres of woodlands, while the Preferred Alternative impacts 0.7 acres of woodlands. 0.5 acres of woodlands is impacted by Alternative 1. The woodlands impacted include buffer area for highly suitable Indiana bat habitat west of Platt Road and north of existing US-12. Impacts to streams (three stream crossings) are identical for the Recommended Alternative, the Preferred Alternative and Alternative 1.

Land Use - With regard to ROW requirements and residential/business displacements, the Recommended Alternative has fewer impacts on residential and business parcels along the US-12 corridor. The Recommended Alternative will require 6 residences and one business to be relocated. Comparatively the Preferred Alternative would have required 10 residences and 2 businesses and 25.3 acres more ROW (77.2 compared to 51.9 acres for the Recommended Alternative).

Overall, MDOT believes the Recommended Alternative provides a more balanced solution to the area's identified transportation needs and meets the study's purpose and need better than the other alternatives.

**Comment:** The EPA would like to know how the Preferred Alternative fits into the Pittsfield Township's Access Management Plan to limit access to residential and commercial units located north and south of US-12 along the 1.5 mile stretch where the five-lane urban arterial/four-lane urban boulevard will be constructed.

**Response:** The Recommended Alternative is consistent with both Pittsfield Township and the City of Saline's access management plans prepared in 2002. Both Pittsfield Township and the City of Saline's access management plans seek to minimize the number of access points along the US-12 corridor and maximize the spacing between existing access points. The Recommended Alternative incorporates many of the parcel specific recommendations contained within each community's access management plan. For example, one of the primary reasons the 1.5 mile boulevard cross-section was selected was the future access management benefits this alternative provided through an area envisioned for more commercialized development within Pittsfield Township. As part of the development of the Recommended Alternative MDOT assured reasonable access was provided to all existing parcels which currently have frontage along US-12.

**Comment:** EPA suggests that MDOT incorporate the combination of grassy swales and overland flows as suggested in the EA to filter pollutants washed into the median. These mitigative tools will also serve to control erosion. EPA also suggests a native vegetative buffer be installed at those wetland/roadway interfaces and stream crossings where road widening and grading will be accomplished. Vegetative buffers serve to filter contaminated pollutants from further degrading impaired wetland resources. EPA would like to see more detailed information regarding mitigation to filter stormwater be included in the FONSI.

**Response:** During the design phase of this project, MDOT will provide a more detailed plan which will incorporate grassy swales and overland flows to filter pollutants washed into the median. MDOT will also provide for a native vegetative buffer that will be installed at the wetland/roadway interfaces and stream crossing where road widening and grading will occur.

4. The Michigan Department of Agriculture has reviewed the document and had the following comment:

**Comment:** The Department of Agriculture has indicated that their primary concern as it relates to this project is the potential effect on established drains, particularly intercounty drains. The Department understands that MDOT will continue to work closely with the Washtenaw County Drain Commissioner in planning and construction of this project as it relates to these drains.

**Response:** Comment noted.

## 2.2 LETTERS FROM LOCAL AGENCIES

1. The Washtenaw County Road Commission (WCRC) has reviewed the document and had the following comments:

**Comment:** The WCRC indicated that Pittsfield Township has studied the possibility of building a new public safety building near the intersection of Campbell Road and US-12. They feel that incorporating this type of facility introduces new challenges whether the cross-section at the point in the project is a five-lane or a four-lane boulevard. WCRC believes that MDOT should address these impacts in more detail.

**Response:** MDOT is aware that the township is looking at building a new facility. MDOT will continue to work with the township to ensure that proper access is provided to the new facility.

**Comment:** The WCRC indicated that a long-term solution for resolving congestion issues in eastern Washtenaw County and specifically in Pittsfield Township will involve some type of improvement on an east-west roadway, including but not limited to Morgan, Textile, Bemis, Willis, or Ellsworth Roads. This type of improvement may require the need to access or overpass US-23. The WCRC feels that the report may need to be amended to at least reflect the possibilities based on MDOT's assessment even though no final conclusion or recommendation will be offered. Furthermore, any long term analysis of this area will require the consideration of an overpass to the US-23 roadway. The impact of such an improvement is not reflected in the US-12 improvement study documents.

**Response:** During the Illustrative Alternatives phase of the US-12 Improvement Study, a new Morgan Road overpass over US-23 Alternative was developed and evaluated. This alternative was not carried forward for future consideration in the Practical Alternatives phase due to numerous impacts and the alternative not meeting the US-12 purpose and need for roadway improvements. During the final design phase, MDOT will coordinate with WCRC and other agencies regarding any issues or proposed improvements that are planned for local roads in Pittsfield Township.

**Comment:** WCRC would like an opportunity to evaluate the proposed realignment of the south leg of Textile Road, and to discuss how the complexity of the intersections of Platt/Textile/US-12 within the Preferred Alternative are integrated.

**Response:** Throughout the US-12 Improvement Study MDOT has coordinated with the WCRC regarding adjacent local road improvements. MDOT will continue this coordination during the design phase. Specifically, MDOT will coordinate with the WCRC regarding any issues associated with the US-12/Textile Road intersection in Pittsfield Township.

**Comment:** WCRC recommends that the median utilized in the four-lane urban boulevard cross-sections be altered to reflect a raised median with curb and gutter, as used in the recent improvements on Jackson Road in Scio Township. WCRC feels that this type of design provides for better aesthetics, drainage and

reduces maintenance of debris which will collect in the depressed median as compared to the median constructed on M-59.

**Response:** MDOT has elected to construct a grassy swale median. This median treatment is preferred by the EPA for the added ability to filter pollutants that get washed into the median. This median treatment will also assist in the control of soil erosion.

2. The City of Saline has reviewed the document and had the following comments:

**Comment:** The 5-lane urban cross-section should match closely, the geometry of the existing 5-lane cross-section that ends at the east line of the Visteon Plant.

**Response:** During the design phase, MDOT will coordinate with the City of Saline regarding any issues associated with the western termini for the project. As proposed the Recommended Alternative will match the geometry of the existing 5-lane cross-section west of Industrial Drive.

**Comment:** The 5-lane Urban cross-section should extend approximately 750 feet east of the centerline of Industrial Drive; that is where the south City Limit line intersects US-12.

**Response:** During the design phase, MDOT will coordinate with the City of Saline regarding any issues associated with the western terminus for the project.

**Comment:** The proposed transition from the 5-lane urban cross-section to the 4-lane urban boulevard should begin approximately 750 feet east of the centerline of Industrial Drive.

**Response:** MDOT did not begin the 4-lane boulevard at this point to minimize impacts to the Brown-McCoy Farmstead. The Brown-McCoy Farmstead was deemed eligible for the National Register of Historic Places and receives special protection under the National Environmental Policy Act and Section 4(f) of the Department of Transportation Act of 1966. To avoid impacts on the Brown-McCoy Farmstead the narrower five-lane urban cross-section was selected.

**Comment:** Part of the 5-lane urban section west of Industrial Drive would have a curbed island, rather than a center turn lane. This has been the City of Saline's plan for several years, and is governed by Access Management measures accomplished by:

- a. Design of Sauk Trail Business Park so that no driveway access can occur on the south side of US-12 from Industrial drive to the entrance to Saline Plaza (approx 2,200 feet in frontage). Some center turn lane stacking would be allowed at the Industrial Intersection for left turns.
- b. Adoption of an Access Management Plan, by MDOT agreement/study and ordinance to provide access management along US-12. The MDOT Access Management concept plan includes the curbed boulevard segment west of Industrial Drive.



**Response:** During the design phase, MDOT will coordinate with the City of Saline regarding any issues associated with the western termini for the project. Specifically MDOT will coordinate with the City of Saline to incorporate provisions contained within their “Gateway Study” into the construction phase of the US-12 Improvement Study.

**Comment:** The City of Saline would like to be included in the design phase of this project, to ensure the City’s planning and transportation goals are addressed.

**Response:** During the design phase, MDOT will coordinate with the City of Saline to assure the City’s planning and transportation goals are addressed along US-12 to the greatest extent possible.

## 2.3 LETTERS, COMMENTS AND EMAILS FROM THE PUBLIC

MDOT received 54 public comments which included written comments deposited at the public hearing, emails, individual comments sent via fax, via the project’s web-site, comments sent via the U.S. mail, and comments that were spoken at the public hearing.

1. **Comment:** MDOT received several letters, emails and comments in support of the Preferred Alternative which includes the widening of US-12 to five lanes with a four lane boulevard section, as well as modifications to US-12/US- 23 interchange

**Response:** Comments noted.

2. **Comment:** MDOT received several emails, letters and comments from the public who were not happy with the selection of the Preferred Alternative and asked that MDOT reconsider other alternatives for improving US-12.

**Response:** MDOT analyzed and evaluated numerous alternatives based on a set of criteria that was included in the Environmental Assessment. MDOT not only looked at the impacts but also the benefits for each of the alternatives. In the end, a modified Preferred Alternative was selected as the Recommended Alternative. The Recommended Alternative provides a more balanced solution to the area’s identified transportation needs and meets the study’s purpose and need better than the other alternatives.

3. **Comment:** Can the portion east of the interchange be constructed first rather than just addressing the interchange area first as is proposed within the EA?

**Response:** The US-23/US-12 interchange area was preliminarily identified as the first segment to be improved along US-12 for several reasons. This area currently experiences the greatest amount of delay and congestion during the peak hour period along the corridor. Additionally long-term bridge improvements will need to be made within the near future. By addressing this segment first, MDOT can improve the overall LOS of the US-23/US-12 interchange area and address its long-term bridge needs. The segment between Carpenter Road and the east project limits (Munger Road) has preliminarily been identified as the second phase to construct following the interchange. Once funding for the

construction phase of this project is identified, MDOT will reassess its phasing strategy to assure the overall needs of the community are being met.

**4. Comment:** Concerned about the impact that the proposed project will have on the Rolling Hills Subdivision located west of State Street on the north-side of US-12. Specific concerns include the poor timing of traffic signals along US-12, the additional traffic volumes and the increased noise levels that will be created by this proposed improvement.

**Response:** Regarding signal timing concerns, MDOT will reexamine the signal timings along the US-12 corridor during the design phase and following construction of the project. This analysis will be used to determine if existing signals need to be retimed, if any new signals should be added, and if any existing signals need to be removed or relocated.

Regarding noise analysis, MDOT examined the impact that additional traffic and noise levels would have on all noise-sensitive receivers (i.e., schools, churches, residences, etc.) along the corridor. FHWA has developed noise criteria (23 CFR Part 772) which MDOT is required to follow. According to these regulations, traffic noise impacts occur when the predicted noise levels approach or exceed the FHWA noise abatement criteria or when the predicted traffic noise levels substantially exceed the existing noise levels. A noise level within one decimal (dBA) of the criterion is considered by FHWA to be “approaching the criterion”. An increase of 3 decibels is barely perceptible to the human ear, an increase in 5 decibels is perceptible, and an increase in 10 decibels is equivalent to being twice as loud and is considered by FHWA to be a “substantial” noise increase.

At residences and other noise sensitive locations, FHWA has defined a noise impact as occurring when predicted outdoor noise levels approach or exceed 67 dBA in terms of  $L_{eq}$  during the peak hour. The existing peak hour noise levels near the entrance of the Rolling Hills subdivision range from 61.5 dBA to 63.4 dBA. The future (2025) peak hour noise levels are projected to range between 63.2 dBA and 65.3 dBA or an average resulting 1.8 decimal increases over existing conditions. This noise increase is still below the FHWA defined impact threshold and will barely be perceptible to the human ear.

**5. Comment:** Does not like the proposed US-23/US-12 interchange and would like to see an EB US-12 to NB US-23 ramp using a right hand turn movement. Are there quantitative study results or simulations which show how the proposed changes will improve traffic flow and improve capacity?

**Response:** Yes, the footprint for the Recommended Alternative was developed based on traffic analysis contained within the July 2003, US-12 Improvement Study Traffic Analysis Technical Report. The Recommended Alternative provides the necessary Right-of-Way to accommodate the construction of an eastbound US-12 to northbound US-23 loop ramp.

Currently the eastbound US-12 to northbound US-23 movement operates at a Level of Service (LOS) D in the morning peak hour period which is the period during the day which experiences the highest volumes for this movement. LOS D means many vehicles are delayed at the signal and individual signal-cycle failure will be noticeable. Average delays during LOS D conditions range

between 35 and 55 seconds. In the future (2025) the LOS for this intersection is projected to degrade to LOS E.

With the proposed five-lane improvement and the re-alignment of the US-23/US-12 interchange ramps, future (2025) traffic volumes for the eastbound US-12 to northbound US-23 movement is projected to improve to LOS C conditions. LOS C conditions means a number of vehicles are stopping at the intersection, however many pass through without stopping. Average delays associated with LOS C conditions range between 20 and 35 seconds. If the eastbound US-12 to northbound US-23 loop ramp is constructed, the future (2025) LOS for this intersection is projected to improve to LOS B conditions. Generally, MDOT designs its urban interchanges for LOS D conditions or better.

When design, Right-of-Way, and construction funds are secured, MDOT will reevaluate the traffic projections for the eastbound US-12 to northbound US-23 movement. If traffic conditions warrant the need for an eastbound US-12 to northbound US-23 loop ramp, MDOT will incorporate that improvement into the final design for the project.

6. **Comment:** Likes the Preferred Alternative and is satisfied that it complies with the Township's Access Management Plan, however would MDOT reconsider a more efficient access pattern for the US-23/US-12 interchange?

**Response:** Comment noted about the Preferred Alternative's compliance with the Township's Access Management Plan. Regarding the US-23/US-12 interchange comment, please see the response above.

7. **Comment:** Concerned about noise levels on Campbell Road. Is there any way to aid the residents along Campbell Road who are already affected by noise? Would like to see noise abatement constructed along Campbell Road and feel that after the improved road is constructed, houses along Campbell Road will qualify for noise abatement. Would like to see a noise analysis performed after the road is improved and would like to see noise abatement added.

**Response:** At residences and other noise sensitive locations, FHWA regulations (23 CFR, Part 772) and MDOT policy has defined a noise impact as occurring when predicted outdoor noise levels approach or exceed 67 dBA in term of  $L_{eq}$  during the peak hour.

The existing peak hour noise level adjacent to residences along the southern portion of Campbell Road is 55.6 dBA. The future (2025) peak hour noise level is projected to be 56.1 dBA a 0.5 decimal increase over existing conditions. This noise increase is still well below the FHWA defined impact threshold and will not be perceptible to the human ear. Therefore, MDOT will not perform any further noise analysis or provide noise abatement options along Campbell Road.

8. **Comment:** Feels the US-23/US-12 interchange would yield little improvement for the cost, and would instead like to see a cloverleaf design to totally eliminate lights and stopping to enter onto US-23.

**Response:** The Recommended Alternative will improve traffic operations at the US-12/US-23 interchange. The Recommended Alternative interchange design acceptably accommodates future (2025) traffic volumes for all interchange movements and specifically improves the eastbound US-12 to northbound US-23 movement to LOS C conditions during the AM and PM peak periods.

A cloverleaf interchange design was evaluated for the US-12/US-23 interchange. However, installation of a full cloverleaf interchange would require substantially more Right-of-Way within each of the existing interchange quadrants resulting in increased business displacements and increased wetland impacts.

9. **Comment:** Affected property owner on US-12 between Crane and Munger roads would like to know how much of his property would be impacted.

**Response:** In general, to accommodate the Recommended Alternative footprint, MDOT will be required to acquire approximately 25 feet of additional Right-of-Way from both sides of US-12 between Crane Road and Munger Road. This fifty feet of additional ROW is needed between Crane and Munger Road to provide:

- additional travel lanes
- a center-left turn lane,
- curb and gutter,
- need space for drainage and clear vision areas, and
- an additional 10 feet of ROW on each side of US-12 for a future Pittsfield Township non-motorized path.

More specific Right-of-Way information will be available to property owners during the final design phase of the US-12 project.

10. **Comment:** I am opposed to the proposed five-lane cross-section as it is an old road design. MDOT should not widen the roadway as it will only generate more traffic, but should instead only improve the US-23/US-12 interchange.

**Response:** MDOT did evaluate a do-nothing alternative for the study area. In 2025, if MDOT does not add any capacity to the US-12 corridor, several of the intersections will fail operationally and operations along the corridor as a whole will deteriorate. The US-12/Munger Road, the US-12/Crane Road, and the US-12/Textile Road intersections would all operate at a Level of Service F. Level of Service F conditions means there are virtually no acceptable gaps in traffic, and extreme traffic delays averaging more than 80 seconds would be common during the peak hours of the day.

11. **Comment:** MDOT should consider buying property on both sides of the roadway.

**Response:** For a majority of the corridor, MDOT did attempt to utilize Right-of-Way from both the north and south side of the US-12 corridor. In several areas along the corridor however, MDOT attempted to minimize social and environmental impacts along the corridor. For example, on the far western end of the project corridor, MDOT shifted the proposed Right-of-Way to one side of

the road to minimize direct impacts to historic properties determined eligible for the National Register of Historic Places.

12. **Comment:** Agree with the idea to straighten the curve east of Campbell Road. Would like to see the boulevard section extended to the west several hundred feet to allow ample room to merge over to the inside lane in order to make an indirect left-turn to go EB on US-12.

**Response:** Comment noted regarding the existing curve east of Campbell Road, however MDOT was required to change the Preferred Alternative design in order to minimize impacts on the historic Harwood Farmstead. The Recommended Alternative four-lane urban boulevard design has been modified to assure access is provided to the residential land uses (i.e. Rolling Hills subdivision) on the north side of US-12 west of State Road. Final locations of all median cross-overs associated with the boulevard segment will be made within the design phase of the project.

13. **Comment:** Would have preferred that MDOT not schedule a public hearing between Nov. 15 and Nov. 30 (due to hunting season which started Nov. 15).

**Response:** MDOT makes every effort to accommodate the public by avoiding hearing dates that conflict with major holidays or local events. The public hearing date of November 19 occurred four days after opening day, typically the busiest in the firearm deer hunting season. The comment period continued through December 20, 2003, allowing opportunity for citizens to request information and provide comment on the study.

14. **Comment:** Would like to see lighting installed at the intersection of US-12 and Wellesley Boulevard. Are there any plans for this?

**Response:** MDOT has no plans to install street lighting along US-12. In accordance with Act 51 of 1951 (MCL 247.651 et. seq) funding provisions, MDOT only provides street lighting on urban freeways, and usually only at interchanges. Some local communities choose to provide street lighting on state trunklines at their expense. MDOT will coordinate with Pittsfield Township officials during the final design phase for US-12 regarding their interest to install street lighting.

15. **Comment:** Likes the proposed improvements, but would like to see the speed limit lowered.

**Response:** The speed limit is based on the speed of the 85<sup>th</sup> percentile vehicle as determined by a team of representatives made up of the Michigan State Police, MDOT, and the local policing agency. MDOT must post the speed limit at the speed of the 85th percentile vehicle, as determined by a speed study done by the study team. A speed study was done in January of 2002 and no changes in the posted speed limit were recommended. MDOT has committed that prior to beginning the final design of this project, they will request that another speed study be done. If the study shows that speeds on US-12 should be lowered, MDOT will modify their design of the Recommended Alternative accordingly.

16. **Comment:** Would like to see a left turn light added at Platt and Michigan Avenue.

**Response:** A signal study was done at US-12 and Platt Road in February of 2003 to determine if left turn phasing would be appropriate. The results of the study were that the traffic patterns did not meet the appropriate signal phasing criteria.

17. **Comment:** Would like to see a narrower profile for the boulevard.

**Response:** The width of the boulevard is determined by the radius needed for commercial vehicles to traverse the crossovers and proceed in the opposite direction. The preferred alternative boulevard width was 84', but MDOT sometimes consider a 60' width. The 60' width precludes future widening to the median side. However, MDOT has incorporated the 60' width where possible for the Recommended Alternative which will be carried forward to the final design phase of the project.

18. **Comment:** Would like MDOT to coordinate with Pittsfield Township regarding the detention basin at Crane Road and Michigan Avenue (US-12).

**Response:** The MDOT has already met with Pittsfield Township regarding the detention basin located near Crane Road and US-12 and we are working on solutions that benefit both parties.

19. **Comment:** Would like to see a bike/path added for the entire length of the corridor.

**Response:** Limited existing non-motorized facilities exist within the US-12 Improvement Study area. If the Recommended Alternative requires the removal of these existing sidewalks/non-motorized paths, MDOT will replace any existing non-motorized facilities. The addition of a continuous bike path will have to be done through a separate project.

However, Pittsfield Township's Comprehensive Plan calls for an integrated motorized and non-motorized system to be developed which links key destinations along US-12. In support of this, the ROW planned for the Recommended Alternative will accommodate a 10 foot wide area behind the curb for a future sidewalk/non-motorized network. This network will be developed by Pittsfield Township using MDOT enhancement or local funding sources.

20. **Comment:** Would like to see US-12 remain as a 2-lane roadway.

**Response:** MDOT did evaluate keeping the existing road as a two-lane roadway; however, future traffic volumes indicated that the US-12 corridor, including several of the intersections, will fail operationally by 2025 without additional capacity. In addition, during peak travel hours, several intersections along US-12 are already failing operationally with level of service E and F. Existing US-12 in the study area is already about 40% multi-lane roadway, including left and right turn lanes and passing lanes.

21. **Comment:** Would like to see the speed limit reduce to 45 mph.

**Response:** The speed limit is based on the speed of the 85<sup>th</sup> percentile vehicle as determined by a team of representatives made up of the Michigan State Police, MDOT, and the local policing agency. MDOT must post the speed limit at the speed of the 85<sup>th</sup> percentile vehicle, as determined by a speed study. A speed study was completed in January of 2002 and no changes in the posted speed limit were recommended.

22. **Comment:** Would like to see a left turn signal at Platt Road.

**Response:** A signal study was done at US-12 and Platt Road in February of 2003 to determine if left turn phasing would be appropriate. The results of the study were that the traffic patterns did not meet the appropriate signal phasing criteria.

23. **Comment:** Would like to see a left turn put in for the Saline Meadows residents as well as a street light at the park entrance.

**Response:** The MDOT will evaluate the traffic patterns at the entrance to Saline Meadows and determine if any improvements are needed. As this time, MDOT has no plans to install street lighting along US-12. MDOT only provides street lighting on urban freeways, and usually only at interchanges. However, some local communities choose to provide street lighting on state trunkline at their own expense.

24. **Comment:** What interim safety improvements can be added to the interchange?

**Response:** MDOT is committed to providing the safest transportation facilities possible and will continue to reexamine the US-23/US-12 interchange area for possible interim upgrades that can be made until long-term improvements for the interchange can be constructed. One such method which Pittsfield Township and MDOT have already implemented is the development of an access management plan which seeks to manage access points along the corridor. By reducing the number of access points and maximizing to the greatest extent possible the spacing between interchange ramp termini and adjacent access points, safety can be enhanced along the corridor.

In 2005, MDOT will also be constructing a continuous center left-turn lane from the US-23/US-12 interchange westerly to Sauk Trail (the entrance of Warner Creek subdivision). This safety improvement will help improve the flow of traffic on the western end of the interchange area.

25. **Comment:** Can pedestrian and bicycle facilities be constructed as part of this project?

**Response:** An additional 20' of Right-of-Way (ROW) has been included as part of the Recommended Alternative to accommodate future non-motorized travel along US-12. The responsibility to construct these facilities lies with Pittsfield Township. If Pittsfield Township wishes to construct pedestrian and bicycle facilities concurrently with the proposed widening of US-12, MDOT will

accommodate these activities and will incorporate them into the project's construction schedule.

26. **Comment:** Would like to see more traffic lights at Crane Road and Munger Road.

**Response:** A left turn lane is being designed on US-12 at Crane Road. This improvement will be included in a resurfacing project on US-12 in 2005. After the installation of this left turn lane, the MDOT will evaluate the new traffic pattern and determine if a signal is warranted at this location.

A signal study was undertaken in May of 2002 at US-12 and Munger Road. The results of that study revealed that a fully operation signal was not required. The study did reveal that a flashing beacon was recommended. The flashing beacon has been installed.

27. **Comment:** Concerned about the poor timing of lights along US-12

**Response:** MDOT is designing a project to install a continuous center left turn lane on US-12 from Sauk Trail to US-23 in 2005. This should help the signal progression on US-12 in this area and we will re-evaluate the signal timing during our project in 2005. The signal progression in this area is limited due to the high number of vehicles on US-12, US-23 and on the local roads (Platt, Textile and Carpenter).

28. **Comment:** Would like to see a left turn lane for Textile Road, west of US-23.

**Response:** The MDOT is designing a project to install a continuous center left turn lane on US-12 from Sauk Trail to US-23 in 2005. As part of this project the MDOT would like to improve the angle at which the south approach of Textile Road intersects US-12 and therefore, MDOT is currently evaluating improvements to this intersection. A left turn lane will be considered during this evaluation.

29. **Comment:** Concerned about Textile Road between US-12 and Platt Road. Would like this section to be dead-ended with two-way traffic from Platt Road, but with no exit from US-12 west.

**Response:** The Washtenaw County Road Commission has requested that the stretch of Textile Road between Platt and US-12 be left intact and not changed. In order to accommodate east/west traffic flow, MDOT will not modify this intersection.

30. **Comment:** Concerned about problems at Textile Road, west of Platt Road for turns onto Platt north and south during peak traffic hours.

**Response:** The MDOT is designing a project to install a continuous center left turn lane on US-12 from Sauk Trail to US-23 in 2005. This should improve access to US-12 and reduce delays currently attributable to vehicles making left hand turns from the travel lanes. As part of this project the MDOT would like to improve the angle at which the south approach of Textile intersects US-12 and



therefore, the department is currently evaluating improvements to this intersection.

31. **Comment:** Was wondering why there are no paved shoulders on US-12 between Munger Road to Platt Road?

**Response:** The MDOT is planning a project on US-12 in 2005 that will install a left turn lane from Sauk Trail to US-23 and continue with resurfacing from US-23 to I-94. As part of this project paved shoulders will be installed along US-12 within these limits.

In the proposed widening of US-12, paved shoulders are optional from Carpenter Road to Munger Road due to the fact that the posted speed limit is 45 mph. In areas where the posted speed limit is 55 mph, shoulders are required. Based on comments from the local officials and citizens, the preference was to eliminate the shoulders where possible in order to minimize the width of pavement and reduce Right-of-Way acquisition and impacts.

32. **Comment:** Indicated that the expense of the EA document (\$70.00) makes public access to the document in a format that permits meaningful study and review costly and difficult.

**Response:** There was a misunderstanding by MDOT staff regarding the department's policy in sending EA documents to people who request a copy of a document during the review period. MDOT does not charge residents who request a personal copy of the document. MDOT has reimbursed the citizen for \$70.00, and is sorry for any inconvenience this may have caused.

33. **Comment:** Would like MDOT to coordinate with the City of Saline in reviewing design plans, especially in regard to the City's "Gateway Study".

**Response:** MDOT will coordinate with the local agencies regarding design plans, as well as any other issues that may come up during the final design phase of this project.

34. **Comment:** The speed limit on US-12 has obvious implications on safety, noise and congestion. Why was lowering speed limits not incorporated into the EA as a separate alternative? No consideration is given to whether a lower speed limit might be a feasible alternative to changes in alignment or as means to avoiding Section 4(f) properties.

**Response:** As was stated above, MDOT is required to design roadway improvements based on the 85<sup>th</sup> percentile vehicle driving on the existing road. For US-12 that means 85% of the vehicles are traveling 45 MPH between Platt Road and Munger Road and 55 MPH between Platt Road and east of Industrial Road. A speed study was done by the Michigan State Police in January of 2002 and no changes in the posted speed limit were recommended.

Therefore, MDOT's design must be consistent with the existing speeds and correspondingly alternative feasible alternatives must be based on current speeds. As part of on-going coordination with both local stakeholders and the public, MDOT has committed that prior to beginning the design phase of this project; MDOT will request the Michigan State Police conduct another speed

study to determine the 85<sup>th</sup> percentile speed of vehicles on the existing road. If this study shows that the speeds on US-12 should be lowered, MDOT will modify the design of the Recommended Alternative accordingly.

35. **Comment:** It is difficult to understand why the Preferred Alternative is in fact, “preferred” as Table 2.4 within the EA shows the Preferred Alternative scoring worse in some categories than some of the Practical Alternatives.

**Response:** The Preferred Alternative has been modified. The Recommended Alternative now has fewer impacts in all categories in Table 2.4 except for wetlands and woodland.

36. **Comment:** No explanation is provided which describes the methodology involved in selecting a Preferred Alternative. No public comment was possible before the selection of the Preferred Alternative.

**Response:** The process followed and the methodology used to select the Preferred Alternative are described in detail in Section 2 of the EA. Specifically, Table 2.5 and Figure 2.7 outline the process that MDOT followed to select a Preferred Alternative.

Regarding the comment that no public comment was possible before the selection of the Preferred Alternative, MDOT had extensively consulted with interested parties including local officials, stakeholders, and the public throughout the duration of the study. As part of this study, MDOT held two public information meetings (March 2002, November 2002), 8 stakeholder meetings, prepared three newsletters which were distributed to over 300 people, and responded to numerous e-mail comments submitted on the project’s web-site prior to issuing the EA which contained the Preferred Alternative. All of the comments received from the aforementioned sources were used in the evaluation of both Illustrative and Practical Alternatives and ultimately the selection of the Preferred Alternative as well as the refinements associated with the Recommended Alternative.

MDOT, in accordance with the National Environmental Policy Act of 1969 as amended, is permitted to identify a Preferred Alternative as part of the Environmental Assessment. MDOT made the decision to identify a Preferred Alternative as part of the EA because the overall differences between the Practical Alternatives presented in November 2002 and the Preferred Alternative presented at the November 2003 public hearing were relatively minor. Furthermore, changes and modifications to the Preferred Alternative were made as a result of comments received at the public hearing, as well as comments received from local, state, and federal review agencies.

37. **Comment:** It is claimed that US-12 will be “straightened to meet current MDOT roadway design standards.” The identity or nature of these standards is not specified. It is not specified if MDOT specifications are sensitive to such factors as speed limits. No explanation is provided indicating how compliance with MDOT design standards should be weighted against other study considerations?

**Response:** MDOT’s design criteria for this project are listed in Table 2.3 of the EA. MDOT’s design criteria are sensitive to speed limits. As shown in Table 2.3 the design speed for a majority of the US-12 corridor is 60 MPH (5 MPH greater

than the current posted speed limits on US-12). For those areas along US-12 where the existing speed limits are 45 MPH, the design speed will be 50 MPH.

As was stated above, MDOT is required to design roadway improvements based on the existing speed limits. The Federal Highway Administration requires that MDOT meet minimum design standards in order to be eligible to receive future federal funding for this project. The design standards used for the US-12 project, which are shown in Table 2.3 of the EA, meet or exceed these minimum design criteria based on the existing speeds along US-12. Using these minimum design criteria, MDOT has attempted to avoid and minimize direct impacts on the natural and social environment..

Since the public hearing, MDOT has coordinated with the Federal Highway Administration and will be seeking to remove the paved shoulders from the section of US-12 between Warner and Platt Roads in order to minimize impacts on the historic Harwood Farmstead.

38. **Comment:** MDOT owns a substantial portion of additional Right-of-Way on the south side of US-12 (just east of Warner Road). No mention of this was made within the EA. No effort is made to assess the significance of the relatively lower ROW acquisition and lower public costs that a southern alternative in this vicinity would entail.

**Response:** MDOT does own approximately 160' of Right-of-Way (ROW) near the US-12/Warner Road intersection. This ROW was leftover after MDOT realigned this portion of the US-12 and reconstructed the bridge over the Ann Arbor Railroad. In order to construct Practical Alternative 1 (referred to as the southern alternative), MDOT would have required additional ROW to the south of MDOT's existing ROW. MDOT did evaluate preliminary ROW costs for Practical Alternative 1 and compared them to the other alternatives under consideration at that time. This cost is included in Table 2.2. The Recommended Alternative will utilize a portion of this ROW.

39. **Comment:** Reference is made to reduced noise impact to residents of Warner Creek associated with the Preferred Alternative. No effort is made to quantify this effect on the Section 4(f) properties and the endangered T&E species habitat.

**Response:** Noise impacts were evaluated for all noise sensitive receivers throughout the study area in accordance with NEPA and FHWA guidelines. The results of this analysis are summarized in Section 3.0 of the EA. MDOT's complete noise analysis for the US-12 Improvement Study can be found in the October 2003, "Noise Analysis Technical Report".

Regarding the highly suitable habitat for the federally endangered Indiana Bat, the Recommended Alternative will not exceed FHWA's noise abatement criteria of 67dBA. The portion of the woodlot which contains this suitable habitat is located well outside of the 66 dBA noise contour line as illustrated in Figure 3-7 in the EA.

Regarding the Pittsfield Preserve property, an increase in noise levels is expected with the Recommended Alternative. Existing noise levels at the southern edge of the Pittsfield Preserve property are approximately 66.8 dBA.

With Practical Alternative 1 (five-lane) and the Recommended Alternative noise levels are projected to increase to 67.4 dBA. Through continuing consultation with Pittsfield Township, MDOT has been informed that active recreation uses will not likely be located on the southern end of the property immediately adjacent to US-12. Therefore direct noise impacts to this portion of the Pittsfield Preserve are expected to be minimal. To help off-set these proposed noise increases, MDOT will plant long-lived native trees and shrubs suited to local site conditions to help provide a buffer between the US-12 corridor and the Pittsfield Preserve property.

Regarding the Section 4(f) Harwood Farmhouse, existing and expected noise levels will be similar to the Pittsfield Preserve volumes shown above. The Recommended Alternative will result in a slight increase over existing noise levels as it brings the existing roadway closer to the Harwood structure.

40. **Comment:** Consideration of adverse noise effects are not used in a uniform or consistent manner throughout the EA. Noise results are only referenced when they support a recommendation.

**Response:** MDOT summarized the results of its noise analysis within the EA. The reported results within the EA focused primarily on those concentrated or clustered noise sensitive receivers (i.e., subdivisions) that would be eligible for mitigation under FHWA's guidelines. A complete listing of individual parcel specific noise impacts can be found within the October 2003, "US-12 Improvement Study Noise Analysis Technical Report".

41. **Comment:** The Warner Creek Homeowners Association has been the loudest, most vocal, and most threatening stakeholder in the process. The special treatment afforded them with regard to their noise impact is troubling, especially given how little of the selection of the Preferred Alternative was subject to public notice and comment.

**Response:** MDOT has provided no special treatment to the Warner Creek Homeowners Association or any other group throughout the US-12 Improvement Study. The Warner Creek Subdivision Association was one of many subdivision associations invited to be a member of the stakeholders group at the onset of the study. They are an active participant in the study as are many other local interest groups along the US-12 corridor.

42. **Comment:** The Pittsfield Township Future Land Use plan indicates that portions of the land north of US-12 in the affected area are slated for moderate density residential land use. Detrimental impacts on planned land uses north of US-12 have not been considered.

**Response:** Throughout the duration of the study MDOT coordinated with Pittsfield Township regarding future planned land uses located both north and south of US-12. The Recommended Alternative is consistent with current Pittsfield Township land use plans and minimizes impacts to the greatest extent possible on proposed development adjacent to US-12.

43. **Comment:** There is no substantive content to the assertion that the Preferred Alternative meets the study's purpose and need.

**Response:** Both the Preferred and Recommended Alternatives meet the purpose as well as the four basic needs of the study as outlined in Sections 1.3 - 1.4. Specifically the Recommended Alternative accommodates the projected traffic demands, improves system continuity, results in a reduction of crashes, and provides viable access to existing and planned developments along the US-12 corridor.

44. **Comment:** Substantial evidence in the EA supports the proposition that one of the most significant parcels of land within the study area is the Pittsfield Preserve (Section 4(f) protected), more specifically the 49-acre woodlot that lies west of Platt Road. The selection of the Preferred Alternative inflicts great and unnecessary harm to this highly valued section of land.

**Response:** The portion of the woodlot that would be impacted by the Recommended Alternative is not within the Pittsfield Preserve thus it is not protected under the provisions of Section 4(f). Rather the portion of the woodlot that would be impacted is privately owned property which lies between the Pittsfield Preserve Property and US-12.

45. **Comment:** No Section 4(f) methodology is provided that states (1) what the range of alternatives considered were, (2) how the range of alternatives were selected, or (3) along what parameters each alternative was evaluated to determine if it was “prudent” or “feasible”.

**Response:** Section 4.5 within the EA outlines the avoidance alternatives analyzed by MDOT as part of the Section 4(f) analysis. Section 4.4 and Table 4.2 within the EA respectively provide the parameters for which each alternative was evaluated. The modification of the Preferred Alternative further reduces the impacts on the Section 4(f) properties along the US-12 corridor.

46. **Comment:** The Section 4(f) analysis only evaluated and provided a side by side comparison for the Preferred Alternative and Practical Alternative 1-N.

**Response:** MDOT did evaluate the Preferred Alternative, and Practical Alternative's 1 and 1-N as part of the Section 4(f) analysis. A side by side comparison of all three of these alternatives is provided on page 4-8 of the EA on Table 4.2.

47. **Comment:** It is incumbent upon MDOT to consider a wide range of non-study options to prevent improper intrusion upon land protected by Section 4(f). For example, one prudent and feasible alternative to straightening the curve at Campbell Road would simply be to reduce the speed limit to a point where the curve would be viewed as safe under current MDOT standards. There is no evidence in the record that alternatives such as this were explored. Furthermore, no effort is made in light of Section 4(f) standards to state why these alternatives were not considered feasible or prudent.

**Response:** As mentioned previously, MDOT is requesting to remove the shoulder of the roadway between Warner and Platt Road to minimize impacts on the Section 4(f) resources. MDOT is required to design roads based on 85<sup>th</sup> percentile of vehicles and the existing speed limit (55MPH) for the area adjacent to the Section 4(f) eligible properties. Arbitrarily reducing the speed limits along

this one section of US-12 would be inconsistent with how vehicles travel along the US-12 corridor. Therefore, this alternative is not “prudent and feasible”.

Alternative alignment alternatives were evaluated by MDOT as part of the Section 4(f) analysis. These alternatives are shown in Figure 4.2 of the EA. The north avoidance alternative shown in Figure 4.2 within the EA was dismissed. The State Historic Preservation Office would not support this alternative as it physically separated the Harwood Farmstead and the Harwood family cemetery located northwest of the Harwood farmstead at the intersection of Campbell Road and Textile Road.

The south avoidance alternative shown in Figure 4.2 was dismissed. This alternative resulted in impacts on the Harwood Farmstead as it moved the roadway approximately 15 feet closer to the Harwood house. This alternative resulted in increased noise levels, loss of vegetation, and detrimental impacts to the overall character of the Harwood Farmstead. Additionally, the south avoidance alternative resulted in greater noise and air quality impacts to existing residences as well as a planned subdivision located south of US-12.

**48. Comment:** What weight was given to various factors – impacts to nearby existing or planned residences, businesses, the Pittsfield Preserve, the woodlot near Platt Road? Additionally no effort is made within the Section 4(f) analysis to describe how safety concerns are weighted in light of Section 4(f) concerns.

**Response:** Following the National Environmental Policy Act, MDOT is required to evaluate all of the aforementioned factors as well as numerous other factors to assess the social, economic, and environmental impacts of each alternative under consideration. MDOT does not assign weight to specific criteria throughout its analysis; rather it follows a systematic interdisciplinary approach in its planning and decision-making process.

Regarding safety concerns versus Section 4(f) concerns, MDOT always seeks to provide a balance between developing and maintaining safe transportation facilities while minimizing impacts on federally and state protected resources. This was also the case throughout the development and refinement of alternatives during the US-12 Improvement Study. All alternatives were developed to meet MDOT’s and AASHTO’s minimum design standards. Concurrently MDOT through its alternative refinement process sought to minimize impacts on the natural and social environment.

**49. Comment:** Likes the Preferred Alternative and would like MDOT to begin funding phases of this project as soon as possible. MDOT should evaluate creative thinking to find funding for the project.

**Response:** No funding for the design, right-of-way acquisition of construction of the US-12 Improvement Study has been committed by the Michigan Department of Transportation. In 2003, Governor Granholm made preservation of the existing roadway system MDOT’s first priority. As the road system ages, Michigan’s interstate and state highway system require increasing maintenance. In response, the department has been working for several years towards a system goal of 90 percent good trunkline conditions by 2007. When MDOT is confident that it can meet and sustain this condition goal, and when additional

revenues are available, capacity improvement projects such as a future improved US-12 corridor may again be advanced.

50. **Comment:** I am disappointed that Alternative 1-N was dismissed. As a resident of Warner Creek Subdivision Association I feel as though my concerns have been ignored.

**Response:** Practical Alternative 1-N was not selected as the Preferred Alternative because of the impacts to the Pittsfield Preserve, the federally endangered Indiana bat habitat located west of Platt and south of Textile Road, Section 4(f) impacts, increased ROW costs, and other reasons outlined in Sections 2.0 and 3.0 of the EA. Practical Alternative 1 was modified in attempt to address some of the concerns (i.e., noise and air quality) expressed by the Warner Creek Subdivision Association at the fall 2002 stakeholder and public information meetings.

51. **Comment:** I would like a berm placed in front of the Warner Creek Subdivision to protect the residents from vehicle-house collisions and to provide a noise and air quality buffer between US-12 and houses within the Warner Creek Subdivision.

**Response:** As a context-sensitive design solution, MDOT will incorporate an aesthetic berm into the design plans. This berm will be an extension of the existing landscaped berms in front of the Warner Creek Subdivision and will be located on existing MDOT Right-of-Way (ROW) that is excess due to the realignment of US-12. Where existing excess ROW is not available, no berm will be constructed.

These berms will provide greater separation between the Warner Creek Subdivision and US-12. During the final design phase of the project, MDOT will coordinate the design of such berms with both Pittsfield Township and the Warner Creek Subdivision Association.

52. **Comment:** Pittsfield Township Supervisor James Walters supports the request from the Warner Creek Subdivision to have a berm constructed on the south-side of US-12.

**Response:** Comment noted. MDOT is committed to constructing a berm in front of the Warner Creek Subdivision, please see response above.

53. **Comment:** What kind of noise abatement measures is MDOT proposing for residents of the Hickory Pointe Subdivision?

**Response:** MDOT will provide noise mitigation for residents of the Hickory Pointe Subdivision. The specific type of noise mitigation (i.e., 16' noise wall, 20' noise wall, earthen berm, etc.) will be determined during the final design phase of this project. As part of the design phase, MDOT will coordinate with the residents of the Hickory Pointe Subdivision and Pittsfield Township to assure the appropriate mitigation is developed.

54. **Comment:** Likes the Preferred Alternative and would like to volunteer time and native trees to enhance the project. Would like to see native

landscaping placed within the median of the 4-lane boulevard section and along the outside of MDOT's right-of-way.

**Response:** Final landscaping plans for the median areas and other areas within MDOT's US-12 right-of-way will be developed within the future design phase of the project. Any landscaping that would like to be donated to the project would need to be done under the guidelines of a permit issued by the MDOT Brighton Transportation Service Center.

55. **Comment:** Concerned about the impacts the Preferred Alternative will have on the Rolling Hills Subdivision located north of US-12 and west of State Road. Specifically concerned about the impacts to the existing berm in front of the Rolling Hills Subdivision. Can the boulevard be narrowed so it will not severely impact the existing berm?

**Response:** The Recommended Alternative requires approximately 67 feet to 76 feet of ROW (approximately 1.93 acres) from the front of the Rolling Hills subdivision. This required ROW affected Rolling Hills Subdivision's existing earth berm along US-12. To minimize impacts in this area, MDOT has reduced the Preferred Alternative boulevard cross-section width by 24 feet for the Recommended Alternative. In addition, for the Preferred Alternative, the Rolling Hills property fell within the full width of the boulevard cross-section. For the Recommended Alternative, the point of beginning for the boulevard cross-section as been moved easterly, and the Rolling Hills subdivision entrance falls near the beginning of the transition from a five-lane arterial to a full boulevard cross-section.

These design changes reduce the impacts on the subdivision. With the development of the Recommended Alternative, ROW requirements from the Rolling Hills subdivision now range from a strip of land from 33' to 49' wide, totaling approximately 1.03 acres. This reduction in required ROW results in a Recommended Alternative that would have only minor impacts to the existing Rolling Hills landscaped berm, if any impact at all. Also, MDOT will mitigate any impacts to the berm, restoring it to its original condition to the greatest extent possible after construction of the new US-12 roadway.

56. **Comment:** Would like to see a boulevard concept for the entire project, but understands the reasoning why it was deemed not practical.

**Response:** Comment noted.

57. **Comment:** MDOT's Preferred Alternative does not put people first and the majority of people living along US-12 will suffer disproportionate adverse environmental impacts.

**Response:** MDOT has and will continue to seek input from residents who live along US-12 as well as other residents who live near the project area. During the study phase, MDOT has held numerous stakeholder meetings for residents and business owners to seek their input on the alternatives that were being considered. In selecting the Recommended Alternative several factors were considered including impacts to residents who live along existing US-12. After comparing all of the alternatives, it was determined that the Recommended



Alternative provided a more balanced solution to the area's identified transportation needs.

MDOT does recognize that no matter what alternative is selected, there will be impacts to the residents and business owners who live along or near the project area. MDOT's goal is to minimize and mitigate any impacts that will occur. MDOT will continue to seek input from the residents and business owners during the design phase in order to minimize and mitigate impacts that may occur as a result of the proposed project.

58. **Comment:** The Preferred Alternative puts protection of the Pittsfield Preserve first before people.

**Response:** A modified version of Preferred Alternative was selected as the Recommended Alternative after evaluating and comparing each of the alternatives. Many factors were taken into consideration when determining the Recommended Alternative. MDOT took into consideration the human as well as the natural environmental impacts that would occur as a result of the proposed project. The Recommended Alternative was selected because it provided a more balanced solution to the human and natural environment.

59. **Comment:** The EA does not address the routes that cars travel during accidents at Warner Creek. More traffic and more speed means more probability of car-house collisions. No protective barrier for Warner Creek residents is proposed as part of the EA.

**Response:** As part of the US-12 Improvement Study, MDOT completed a crash analysis for US-12 including the segment located between Campbell and Platt Roads. The crash history for the segment between Campbell and Platt Roads was reviewed for a six and three-quarter year period from January 1, 1993 through September 30, 1999. The crash data for this 6-year period (1993 to 1999) was used because crash data for Washtenaw County between 2000 and 2002 was determined to be incomplete due to data entry errors.

For the study period there were a total of 81 crashes within the study segment. The data showed a significant increase in crashes from 1993 to 1996 (10 per year to 17 per year), and then a corresponding decrease from 1997 to 1998 (17 a year back to 10 a year). For the six-year period there were a total of seven crashes at or within 200 feet of the intersection of US-12/Sauk Trail (Warner Creek Subdivision entrance).

Fifty-nine percent of the crashes were rear-end crashes, 16% were vehicle-animal crashes. The remaining crashes were either fixed object (9%), side swipe (5%), right angle (4%), pedestrian (1%) or other type crashes. No vehicle-house collisions were reported for the selected time period. Traffic back-ups which can cause sudden stops and starts were likely the predominant cause for a majority of the rear-end crashes. Most likely these crashes were a result of traffic back-ups at the US-12/Campbell Road and US-12/Platt Road intersections.

Of the total crashes 73% were crashes that resulted in property damage only (i.e., no injuries or fatalities); 27% of the total crashes resulted in at least one injury; 0% of the crashes between Platt Road and Campbell Road resulted in a fatality between 1993 and 1999.

MDOT also developed crash rates based on the number of crashes per million vehicle miles traveled for the study segment between Campbell and Platt Roads. For the period of 1993 to 1998 the annual crash rate for this study segment ranged between a low of 1.48 crashes per million vehicle miles traveled in 1993 to a high of 2.89 crashes per million vehicle miles traveled in 1996. These rates were either comparable to or less than Southeast Michigan Council of Government (SEMCOG) regional annual crash rates (2.82) and statewide annual crash rates (2.84).

MDOT understands the safety concerns expressed by the Warner Creek Subdivision and as part of the design phase of the project will commit to expanding the existing berm between US-12 and the subdivision if available right-of-way is available. This berm will provide an increased buffer between traffic traveling on the realigned US-12 alignment and the residents of Warner Creek Subdivision.

**60. Comment:** The EA does not propose any noise protection for the residents of Warner Creek subdivision.

**Response:** A noise analysis was conducted for the US-12 study corridor, using federal and state guidelines and criteria. The noise analysis included field measurements and computer modeling. Traffic noise calculations were performed in accordance with FHWA's report FHWA-RD-77-108 "FHWA Highway Traffic Noise Prediction Model" using the STAMINA 2.0 computer program. This noise model accounts for such factors as ground cover; shielding from local terrain and structures; traffic speeds and volumes; and percentages of medium and heavy trucks.

The noise analysis associated with Practical Alternative 1, the Preferred Alternative, and the Recommended Alternative at the Warner Creek subdivision determined a noise barrier could not be provided to meet the MDOT noise criteria of less than \$34,200 (2003 dollars) construction cost per benefiting receiver. Also, to be effective the noise barrier would need to be continuous and have no breaks or openings in the barrier for street or road access. MDOT coordinated with representatives of Warner Creek regarding this issue and MDOT was informed that the existing access to US-12 should not be removed. Since breaks would be needed for access and the cost per benefiting receiver was not achieved in the Warner Creek subdivision, it was determined that barriers would not be effective and were not recommended at this location.

Additional information about the noise analysis for the US-12 Improvement Study is located in the October 2003 *Noise Analysis Technical Report* and the October 2003 *Environmental Assessment*, Section 3.9.

**61. Comment:** Regarding air quality, only carbon monoxide was tested and tests were not done for particulate matters, sulfur dioxide, ozone, nitrogen oxide and lead. The EA has no plans to protect the largest population of children along US-12 which is Warner Creek subdivision from air pollution.

**Response:** Under the Clean Air Act of 1970, Congress established procedures for developing National Ambient Air Quality Standards (NAAQS) for the protection of human health and welfare. The NAAQS were published by the USEPA in 1971 and became effective at that time. The six pollutants regulated

are inhalable particulates, carbon monoxide (CO), sulfur dioxide, nitrogen dioxide, ozone and lead.

Two types of sources are mainly responsible for the pollutants: stationary sources, such as factories, and mobile sources, such as automobiles and trucks. Sulfur oxides and inhalable particulates are emitted primarily from stationary sources and are monitored on a regional level because the source of these pollutants is from stationary sources such as factories. Carbon monoxide, nitrogen oxides and hydrocarbons are produced mainly from internal combustion engines. Ozone is formed when nitrogen oxides and hydrocarbons combine with other elements and sunlight. Testing of ozone is also done on a regional level because ozone can be transported over long distances and a localized model will not account for pollutants from upwind areas.

The major sources of lead emissions have historically been from fuels in motor vehicles (such as cars and trucks) and industrial sources. Emissions from on-road vehicles decreased 99% between 1970 and 1995 due primarily to the use of unleaded gasoline. Due to the phase out of leaded gasoline, metals processing is the major source of lead emissions to the air today.

Since carbon monoxide is a site-specific pollutant whose major concentrations are generally found immediately adjacent to roadways, it is usually of concern on a local, or microscale, basis. Therefore, a CO microscale air quality analysis was performed to analyze CO levels at receptor sites located near major intersections. Carbon monoxide is the only pollutant analyzed for this type of project.

The purpose of the microscale analysis is to determine the pollution concentrations in the immediate vicinity of a street or highway. The emphasis is on carbon monoxide, since most of its impacts are localized and may be analyzed at the corridor or "hot spot" location such as at a roadway intersection. Sulfur oxides and inhalable particulates are monitored on a regional level because the source of these pollutants is mostly from stationary sources such as factories.

*The results of the CO microscale analysis (shown below) indicate that the No-Build Alternative and Build Alternative will not result in violations of either the one-hour (35.0 parts per million (ppm)) or eight-hour (9.0 ppm) NAAQS for CO. All of the predicted 1-hour CO concentrations are well below the NAAQS of 35.0 ppm. The highest predicted 8-hour concentration, 4.9 ppm at the Carpenter Road intersection, is below the NAAQS of 9.0 ppm.*

***Predicted Carbon Monoxide Concentrations (in parts per million)***

US-12 Intersection	2001 Existing		2025 No Build		2010 Build (Preferred Alternative)		2025 Build (Preferred Alternative)	
	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour
<b>Carpenter</b>	7.8	4.9	7.0	4.3	7.4	4.6	7.8	4.9
<b>Platt</b>	6.6	4.0	5.8	3.5	6.0	3.6	6.2	3.7
<b>State/Moon</b>	5.5	3.3	5.2	3.0	5.4	3.2	5.6	3.3

Note: 1-hour background = 3 ppm      8 hour background = 1.5 ppm

Vehicle delay at the intersections causes vehicles to queue and decrease the air quality near the intersection. The improvements at the Platt Road intersection will reduce vehicle delay and improve the level of service of the intersection under the preferred alternative.

MDOT believes air quality concerns are important on the US-12 Improvement Project and have been addressed in the EA. This view is also held by reviewing agencies. For example, the Official Public Hearing Transcript contains agency comments associated with this project. In the January 8, 2004 letter from the Department of Health & Human Services, it states the following in reference to human health and safety concerns, "...Potential human health concerns from anticipated construction-related impacts appear to have been adequately addressed..."

Additional information about the air quality analysis for the US-12 Improvement Study is located in the October 2003 *Air Quality Analysis Technical Report* and the October 2003 *Environmental Assessment*, Section 3.8.

**62. Comment:** Warner Creek children play in Warner Creek. Tearing up the current roadbed will add untold amounts of toxic chemicals into a creek that hundreds of children play in. The EA does not show any plans for diverting road runoff for Warner Creek during the construction phase. Also the EA does not show how water runoff and retention ponds will benefit residents of Warner Creek subdivision.

**Response:** MDOT conducted a Project Contamination Survey in July 2003. This study found no toxic chemicals within or within the vicinity of Warner Creek. In the event any toxic chemicals are encountered during either the design phase or ROW acquisition phases, MDOT will conduct a Phase II Environmental Site Assessment to better understand the nature and extent of contaminants prior to proceeding to construction. Complete findings of the US-12 Improvement Study's Project Contamination Study can be found within the Project Contamination Survey Technical Report.

Furthermore Section 3.12 General Measures to Mitigate Impacts, C. Water Quality and D. Soil Erosion and Sedimentation Control provides a commitment that soil erosion and sedimentation control measures, based on MDOT's approved soil erosion program, will be implemented for the US-12 roadway improvements. These measures are designed to reduce the potential impact on streams from added runoff and associated pollutants, including deicing salts, heavy metals and pesticides. The proposed storm water management plan will benefit the residents of the Warner Subdivision by protecting water quality in the region.

**63. Comment:** The Warner Creek Subdivision will be covered in dust pollution and particulate matter during construction. The EA has no written protections to protect our children.

**Response:** MDOT recognizes that some dust pollution and particulate matter is a by-product of construction activities. Mitigation measures are outlined in the EA to preserve, to the greatest extent possible, existing neighborhoods, land use, and resources, while improving transportation. Section 3.12 (M) specifically identifies controls of air pollution during construction. These mitigation measures include dust-control during construction and permits for portable bituminous or

concrete plants. Also, the Green Sheet: Mitigation Summary identifies air quality mitigation measures during construction. These requirements will be included in construction specifications to protect the air quality in the project area during roadway construction.

64. **Comment:** The EA does not contain a section stating the cost of this study. This information should have been included in the EA for public review.

**Response:** The current contract to complete the Environmental Assessment and other early preliminary engineering activities included as part of the US-12 Improvement Study is \$2,812,034.

65. **Comment:** The Indiana Bat issue was fabricated as a way of selecting the Preferred Alternative. The Indiana Bat has not been seen in Washtenaw County in over 50 years and does not exist in the entire state of Michigan. This is a disservice to Warner Creek residents.

**Response:** Documentation from Dr. Allen Kurta, Professor of Biology, Eastern Michigan University, indicates that summer records and actual roosts of Indiana bat are known from the southern three tiers of counties in Michigan. A survey ranked a mature 49-acre woodlot west of Platt Road between US-12 and Textile Road as highly suitable for Indiana bats. This federally endangered species is considered widespread but uncommon in the summer throughout these localities. There is a colony of Indiana bats currently under study in Washtenaw County west of Manchester.

The National Environmental Policy Act requires evaluation of biological resources in the study area of a proposed activity. A part of this evaluation includes consultation with the Fish and Wildlife Service under the authority of the Endangered Species Act Section 7. With respect to the US-12 Improvement Study, this consultation resulted in the determination that "the proposed action may affect, but is not likely to adversely affect the Indiana bat."

66. **Comment:** Archaeological surveys of the Harwood Farmstead have not been conducted on the property. These surveys absolutely must be completed before demolition or relocation of the Harwood Farmstead occurs. Conclusive findings from the archaeological studies should have been completed before the Preferred Alternative was selected.

**Response:** The Harwood Farmstead will not be relocated as previously discussed in the Environmental Assessment. MDOT has refined the Preferred Alternative and the resulting impacts will only require the removal of a portion of the vegetation from the front of the farmstead. The area which will be impacted was previously surveyed by MDOT, therefore no further archaeological surveys are proposed.

67. **Comment:** Supports the widening project. Concern expressed that the needed right-of-way be acquired equally from both sides of the current US-12 roadway.

**Response:** In general MDOT has attempted to distribute the right-of-way impacts equally on both sides of US-12. However where there are protected

resources such as wetlands, historic properties, threatened and endangered species habitat, etc. along the corridor, which results in MDOT needing to acquire more right-of-way from one side of the road to minimize the impacts on these resources.

68. **Comment:** There is no evidence within the EA that a qualified biologist ever surveyed the woodlot for the presence of Indiana Bats.

**Response:** Section 3.2 Ecological Environment, Threatened and Endangered Species, page 3-19 cites two studies regarding Indiana bat associated with this project. Dr. Allen Kurta completed a habitat survey in October 2001 to investigate the possible occurrence of the Indiana bat in the study area. The survey ranked a mature 49-acre woodlot west of Platt Road between US-12 and Textile Road as highly suitable for Indiana bats. Dr. Kurta completed a field survey of this woodlot in June 2002 following protocol recommended in the Indiana Bat Recovery Plan developed by the Fish and Wildlife Service. Copies of both of these reports can be found in the US-12 Improvement Study Natural Resources Technical Report.

Dr. Kurta is a Professor of Biology at Eastern Michigan University. He has worked as a private consultant concerning habitat requirements and field surveys for small mammals, particularly endangered species of bats, since 1980. In 2002, he published a book on the biology and management of Indiana bat and has published multiple peer-reviewed papers regarding this species.

69. **Comment:** Why is Pittsfield Township exempt from Section 4(f) laws as Township officials have stated they intend to build a future public safety building and a new community center on the Pittsfield Preserve property.

**Response:** Section 4(f) of the Transportation Act of 1966 applies only to those governmental agencies that seek to utilize federal transportation funding. Pittsfield Township is not proposing a project that meets Section 4(f) criteria and, therefore, is not required to follow the same federal laws that MDOT is required to follow.

70. **Comment:** Can trucks be re-routed along US-12 between I-94 and US-23 (i.e. having trucks that want to travel west-bound on US-12 take I-94 to US-23 south and exit at US-12 to travel west-bound on US-12?

**Response:** US-12 between Detroit and Coldwater has been designated by MDOT and FHWA as an arterial which is part of the National Highway System. Restricting or detouring trucks around US-12 is not permitted.

71. **Comment:** When will funding be identified to complete mitigation projects such as a possible noise wall at Hickory Pointe Subdivision? Will it occur at the same time as construction occurs along this portion of US-12 or will it occur before the project starts or at the very end?

**Response:** Mitigation for a possible noise wall will be finalized during the final design phase of the project. Construction of any noise mitigation measures will be undertaken at the same time road construction begins for that corresponding segment of the US-12 corridor.

72. **Comment:** What is the degree of traffic improvement associated with each alternative considered?

**Response:** The following tables provide an overview of the projected (2025) traffic operations at each major intersection along the US-12 corridor. This data and accompanying analysis can be found within the October 2003 US-12 Improvement Study Traffic Analysis Technical Report.

As shown in the tables below, the Level of Service (LOS) for the P.M. peak hour improves for the Industrial, Moon/State, Platt, Crane and Munger Road intersections with the Five-Lane Build Alternative when compared to the No-Build Alternative

**2025 Two-Lane No-Build Scenario**

Intersection	A.M. Peak Hour		Midday Peak Hour		P.M. Peak Hour	
	Delay	LOS	Delay	LOS	Delay	LOS
Industrial	9.9	A	14.2	B	27.9	C
Moon/State	38.5	D	17.8	B	39.6	D
Platt	33.7	C	27.7	C	65.8	E
Textile (north)	100.1	F	43.2	E	89.6	F
Textile (south)	46.3	E	42.6	E	118.1	F
US-23 SB On Ramp	12.1	B	10.6	B	11.6	B
US-23 SB Off Ramp	39.6	D	18.7	B	39.2	D
US-23 NB Off Ramp	26	C	31.3	C	21.8	C
US-23 NB On Ramp	26	C	31.3	C	21.8	C
Carpenter	35.5	D	32.1	C	40.7	D
Crane	50.9	F	42.7	E	96.5	F
Munger	267.5	F	51.4	F	730.2	F

**2025 Five-Lane Build Scenario**

Intersection	A.M. Peak Hour		Midday Peak Hour		P.M. Peak Hour	
	Delay	LOS	Delay	LOS	Delay	LOS
Industrial	8.7	A	10.6	B	12.7	B
Moon/State	38.7	D	21.6	C	24.9	C
Platt	25.9	C	23.0	C	33.8	C
Textile (north)	73.4	F	49.3	E	104.7	F
Textile (south)	40.3	E	47.9	E	100.4	F
US-23 SB On Ramp	14.9	B	12.4	B	14.1	B
US-23 SB Off Ramp	24.4	C	20.1	C	23.7	C
US-23 NB Off Ramp	23.0	C	39.0	D	27.4	C
US-23 NB On Ramp	23.0	C	39.0	D	27.4	C
Carpenter	28.5	C	40.6	C	43.9	D
Crane	25.6	C	25.9	C	30.7	C
Munger	24.5	C	28.5	C	28.6	C

## 2025 Four-Lane Boulevard Scenario

Intersection	A.M. Peak Hour		Midday Peak Hour		P.M. Peak Hour	
	Delay	LOS	Delay	LOS	Delay	LOS
Industrial	9.5	A	13.4	B	13.8	B
Moon/State	19.3	B	16.2	B	19.0	B
Platt	20.1	C	18.3	B	21.7	C
Textile (north)	73.4	F	49.3	E	104.7	F
Textile (south)	40.3	E	47.9	E	100.4	F
US-23 SB On Ramp	N/A	N/A	N/A	N/A	N/A	N/A
US-23 SB Off Ramp	N/A	N/A	N/A	N/A	N/A	N/A
US-23 NB Off Ramp	N/A	N/A	N/A	N/A	N/A	N/A
US-23 NB On Ramp	N/A	N/A	N/A	N/A	N/A	N/A
Carpenter	N/A	N/A	N/A	N/A	N/A	N/A
Crane	N/A	N/A	N/A	N/A	N/A	N/A
Munger	N/A	N/A	N/A	N/A	N/A	N/A

73. **Comment:** I believe the design and construction phases should begin as soon as possible. Spending 2 years on the study and still no funding in sight for over 5 years implies there will be a serious bottleneck long before a solution is in place.

**Response:** Governor Granholm has made preservation of the existing State roadway system MDOT's first priority. As the road system ages, Michigan's interstate and state highway system requires increasing maintenance. In response, MDOT has been working for several years towards a system goal of 90 percent good trunkline conditions by 2007. When MDOT is confident that it can meet and sustain this condition goal, and when additional revenues are available, capacity improvement projects such as the US-12 roadway improvements may again be advanced.

74. **Comment:** The necessity of this project cannot be overstated. I have no problem with the Preferred Alternative. My only problem is slow pace of the process. This snail-like movement is presumably due to the lack of funds for the project. Creative solutions between the City of Saline, Pittsfield Township, MDOT and private developers should be pursued.

**Response:** See previous comment above regarding the project's schedule.

75. **Comment:** MDOT should coordinate with Pittsfield Township regarding the detention basin the Township is currently designing at the intersection of US-12 and Crane Road.

**Response:** MDOT is currently coordinating with Pittsfield Township regarding the Township's drainage project at the intersection of US-12 and Crane Road. MDOT will also continue to coordinate with Pittsfield Township on this issue when it moves forward into the final design phase of this project.

76. **Comment:** Great plan! As a resident of Warner Creek subdivision, I am pleased with the minimal to positive impact on our subdivision.

**Response:** Comment noted.



77. **Comment:** As the project proceeds it is extremely important that the City of Saline be coordinated with. Truck traffic, safety, and the inability of pedestrians to easily cross US-12 will impact our quality of life. The plan must weigh convenience against practicality and our city's sense of security.

**Response:** MDOT will continue to coordinate with officials from the City of Saline when the project moves into future design and construction phases.

78. **Comment:** As a property owner along US-12, I believe the realignment of the US-12/Crane Road intersection could be accomplished with much less impacts on the adjacent property owners. I would like to be contacted prior to finalization of the plans for this realignment.

**Response:** The Preferred Alternative identified within the EA included a design for the Morgan Road and Crane Road intersections where both roads intersected at 90-degree angles with US-12, at a location approximately 150' west of the existing US-12/Crane Road intersection. Morgan Road was designed to follow its existing alignment from the west, and then curve to the southeast to meet Crane Road at a 90-degree angle with US-12. The remaining portion of existing Morgan Road between this realignment and US-12 was then connected at a 90-degree angle with the proposed Morgan Road and was designed to end in a cul-de-sac adjacent to proposed US-12. The right-of-way (ROW) requirements of this roadway design affected five parcels to south of existing Morgan Road.

In response to public comments to reduce impacts in this area, the MDOT study team has redesigned the proposed US-12/Morgan Road connection for the Recommended Alternative. The roadway alignment and ROW of existing Morgan Road is maintained in this design. Also, in response to property owners' requests, the proposed Morgan Road cul-de-sac adjacent to US-12 has been eliminated. A new roadway connection at a 90-degree angle with the existing Morgan Road alignment now curves southeasterly to meet the proposed Morgan Road/Crane Road intersection with US-12 at the same location and 90-degree angles as the Preferred Alternative. Existing Morgan Road will still provide access to Gainsley Electric Company. However, the existing US-12/Morgan Road intersection will be closed and the existing Morgan Road will end prior to joining US-12. The Recommended Alternative design refinements, which include a new Morgan Road/Crane Road connection and eliminating the Morgan Road cul-de-sac, reduce the ROW impacts by 1.33 acres for the five property owners affected by the Preferred Alternative. Significant ROW impacts to three of five affected parcels have been eliminated entirely.

As a standard program delivery practice, MDOT regularly coordinates and develops communication plans with adjacent property owners, local officials and local transportation stakeholders prior to initiating construction activities. MDOT will continue to coordinate with affected stakeholders throughout the remaining phases of the project.

## **APPENDICES**

# **APPENDIX A**

## **Public Hearing Certification**

## **APPENDIX B**

### **Harwood Farmstead Mitigation Documentation**

**APPENDIX C**  
**Woodland Mitigation Site**  
**Resource Agency Coordination Meeting**  
**Minutes**

**APPENDIX D**  
**Wetland/Woodland Mitigation Site**  
**Preliminary Site Plan**

## **APPENDIX E**

### **SHPO MOA**

## **APPENDIX F**

### **BIOLOGICAL ASSESSMENT & USFWS CORRESPONDENCE**